NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

UPLAND WILDLIFE HABITAT MANAGEMENT

(Acre)
Code 645
Texas Supplement, Zone 1

PRONGHORN ANTELOPE

Habitat Requirements

Cover

The pronghorn antelope prefers open, rolling landscapes where it is able to utilize its keen eyesight and speed for protection. Areas of brushy cover are utilized for protection during fawning and new born fawns. High percentages of fawns can be lost to predation and the lack of fawning cover can contribute to these losses. Effective fawning cover in the High and Rolling Plains should include grasses (15 inches in height) and shrubs such as sand sagebrush, yucca and cholla. These areas need to be large enough (40 to 60 acres) and interspersed in the habitat. Thermal cover is needed during winter periods to protect from snow, ice and severe cold fronts. Low areas with brush cover or juniper breaks meet these requirements.

Food

The pronghorn's diet consists of about 60 per cent forbs, 35 percent browse and 5 percent grass. See Table 1 for important pronghorn food plants. To provide pronghorn with the food supply needed, the habitat needs a variety and abundance of forbs and woody plants of high nutritive value throughout all seasons of the year. When available and accessible, small grains may make up a high percentage of the winter diet. Periods of greatest nutritional stress include gestation, lactation and drought periods. Sheep and goats compete directly with pronghorns for food. Cattle can also consume large amounts of forbs and browse in their diets. This can create overlap during drought and on heavily grazed rangeland.

Water

Daily water needs vary from 1 quart to 1.2 gallons per day. Needs for water are influenced by diet and season of year. Greatest consumption is during hot weather. Available water site within a mile or less is ideal.

Barriers

Barriers to antelope herd movement– highways, railroads, subdivisions and ranch development-- are continually increasing. But the most serious barriers are fences that limit pronghorn movement and access to needed habitat. Net wire fencing poses the greatest problem to movements. Barbed wire fences with close spaced lower wires can also impair movement. To allow adequate pronghorn movement, the fence needs at least 16 inches between bottom of the fence and ground level. This spacing should be 100 to 300 feet in length and at ½ mile intervals.

Habitat Size

Adult pronghorn range averages about 2 miles with maximum movement up to approximate 6 miles**.** The movement can be from summer-fall range to winter-spring range plus movement during drought periods. It is very important that these type movements can take place.

Habitat Management Techniques

Cover

Prescribed grazing is essential to improve rangeland for pronghorns. By utilizing light to moderate grazing and regular rest periods fawning cover can be improved. Pastures utilized for fawning should be deferred during the critical fawning period of May through early July each year.

Brush management that removes a high percentage of the woody species not utilized by pronghorn should performed. See Table 1 for important woody species used by pronghorn. Important woody species should be protected when carrying out brush management. Light brush (<20%) should be left in areas used for fawning cover. Areas of juniper and other thermal cover should be untreated for protection during winter.

Fences

New constructed boundary and interior fences should have areas 100 to 300 feet in length that have the bottom wire at least 16 inches above ground level. This practice should also be carried out on existing fences. These areas should be, as a minimum, no more than ½ mile apart.

Food

Goats and sheep compete for the pronghorn's preferred food plants. Cattle can also eat up to 20 per cent of their diet in forbs and browse plants. This can be critical during dry periods and winter months. Light to moderate grazing using a systematic rotation system is essential. The rotation system must account for weather and growing conditions. Generally, pronghorn food plants are favored by shorter grazing periods and longer rest periods.

Range seeding should include high value forbs to improve pronghorn food supply. Refer to Table 2.

Food plots may increase food supplies. Food plots must be planted and maintained properly to have success. This may include weed control and fertilization. Perennial food plots eliminate annual tillage and planting and may produce better in years when they are most needed. Refer to Table 2 for selected species and planting information. Annual food plots are marginally successful in rainfall areas with less than 16 inches per year unless they are irrigated.

Roller chopping, chaining or shredding can stimulate basal sprouting and increase availability and production of woody plants.

Mechanical methods of brush management minimize losses of forbs and damage to desirable shrubs and trees. Chemical methods will temporarily reduce forb production and may damage or kill desirable shrubs and trees. Some chemicals are more selective than others.

Prescribed burning can improve forb abundance (including legumes) during first 2 years after burn, fawning cover in subsequent years, and overall plant species composition for wildlife and livestock. All burns must be carried using an approved burn plan and by experienced individuals.

Water

Pronghorns use livestock watering facilities. When livestock are removed from a pasture maintain water supply for pronghorn. Refer to Wildlife Watering Facility, Code 648, for selected designs for furnishing water for pronghorns.

References

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APPROVAL

/s/ Gary Valentine
State Wildlife Biologist
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TABLE ONE

IMPORTANT PRONGHORN ANTELOPE FOOD PLANTS

HIGH AND ROLLING PLAINS
MLRA's 77 and 78

BROWSE

Sand Sagebrush
Half-shrub Sundrop
Skunkbush Sumac
Cholla
Juniper Spp.
Feather Dalea
Mesquite

FORBS

Perennial Broomweed
Scarlet Globemallow
Bladderpods
Whitesage
Mentzelia
Texas Croton
Plains Blackfoot
Woolly Plantain
Gaura Spp.
Wild Annual Buckwheat
Western Ragweed
Tahoka Daisy

GRASSES

Blue Grama
Western Wheatgrass
Rescuegrass
Wheat

TABLE 2

Planting Information for Commercially Available Seed

Used for Food Plots or to Enhance Pronghorn Food Supply

	Seed Rate Lbs/Acre [1]					
	Broadcast or Drilled	Rows [2]	Planting Dates	Planting Depth In.	Minimum Rainfall [3]	Comments
Perennials [4]						
Western Ragweed (W)	7.5	NR	12/1 - 5/31	¼ - ½	16	
Western Wheatgrass (C)	7.0	NR	12/1 - 5/31	¼ - ½	20	
Engelmann Daisy (C)	15	NR	9/1 - 2/28	¼ - ½	18	needs cold stratification
Alfalfa [5](CW)	4.0	NR	9/1 - 4/15	¼ - ½	18	short-lived (4 - 8 yr)
Winterfat (W)	7.6	NR	12/1 – 5/31	¼ - 1/2	16	
Coneflower (*Ratibida columnaris*)	4.5	NR	12/1 – 5/31	¼ - 1/2	16	
Skunkbush Sumac (W)	17.8	6.2	12/1 – 5/31	¼ - 1/2	16	
Warm Season Annuals						
Tahoka Daisy	5.0	NR	12/1 – 5/31	¼ - 1/2	16	
Cool Season Annuals						
Wheat	60	20	9/1 - 11/15	1 - 2	18	cold hardy

Footnotes:

1 Seeding rates based on PLS when available, otherwise, use good quality commercial seed.

2 Row planting (20 - 40 inch rows) should be used only when weed control will be carried out between rows. NR - Row planting not normally recommended.

3 Approximate annual rainfall zone recommended for successful establishment. Irrigation recommended when planting west of this line.

4 (W) – warm season forage production. (C) – cool season forage production.
(CW) – provides some forage during both cool and warm season.

5 All legumes should be inoculated with the proper strain of Rhizobium for best production.